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18 FEBRUARY 1999



INVESTOR IN PEOPLE

The Patent Office

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South Wales

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I also certify that by virtue of an assignment registered under the Patents Act 1977, the application is now proceeding in the name as substituted.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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Signed *Andrew Gersey*
Dated 24th March 1999

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The
Patent
Office

GB9803620.5

By virtue of a direction given under Section 30 of The Patents Act 1977, the application is proceeding in the name of

Steribottle Limited
St. Pauls House
8-12 Warwick Lane
London
EC4P 4BN

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The
**Patent
Office**

GB9803620.5

By virtue of a direction given under Section 30 of The Patents Act 1977, the application is proceeding in the name of

Steribottle Limited (BVI)
PO Box 438
Tropic Isle Buildings
Road Town,
Tortola
British Virgin Islands

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Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road
Newport
Gwent NP9 1RH

1. Your reference AJL/IR/P3976

2. Patent application number
(The Patent Office will fill in this part)

9803620.5

3. Full name, address and postcode of the or of each applicant (underline all surnames)

Bibby Sterilin Limited
16 Stratford Place
London
WIN 9AF

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

United Kingdom

526 977 1001

4. Title of the invention

Baby's Bottle

5. Name of your agent (if you have one)

ROYSTONS

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

Tower Building
Water Street
Liverpool
L3 1BA

Patents ADP number (if you know it)

1438001

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number
(if you know it)

Date of filing
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

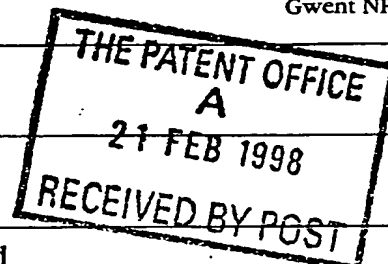
Number of earlier application

Date of filing
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

- a) any applicant named in part 3 is not an inventor, or
 - b) there is an inventor who is not named as an applicant, or
 - c) any named applicant is a corporate body.
- See note (d))

Yes



SECTION 1(1) APPLICATION FILED 22.01.99
SECTION 1(1) APPLICATION FILED 9.03.98

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

4

Description



Claim(s)

Abstract

Drawing(s)

2 + 2

10. If you are also filing any of the following, state how many against each item.

Priority documents

-

Translations of priority documents

-

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*)

-

Request for preliminary examination and search (*Patents Form 9/77*)

-

Request for substantive examination (*Patents Form 10/77*)

-

Any other documents
(please specify)

-

11.

I/We request the grant of a patent on the basis of this application.

Signature

ROYSTONS - AUTHORISED AGENTS

Date 20-02-98

12. Name and daytime telephone number of person to contact in the United Kingdom

A. J. Lyons. - 0151 236 1417/5147

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- If you have answered 'Yes' Patents Form 7/77 will need to be filed.*
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- For details of the fee and ways to pay please contact the Patent Office.*

TITLE : BABY BOTTLES

DESCRIPTION

This invention concerns baby bottles.

Baby bottles generally comprise a container, a separate rubber teat for the mouth of the container and a screw cap to fit over and retain the teat on the container. To ensure that a baby's feed is not contaminated it is generally recommended practice to sterilise a bottle before use. Sterilisation may be achieved by cleaning the bottle in a sterilising liquid. However, sterilisation treatment or even thorough cleaning of a baby's bottle can be overlooked or carried out inadequately causing contamination of a baby's feed.

An object of this invention is to provide a disposable baby's bottle suitable for a single use, thereby negating the need for sterilisation treatment before re-use.

According to this invention there is provided a baby's bottle comprising a container having a mouth, a teat for the mouth of the container and a cap for retaining the teat on the container, wherein the cap is non-removable from the container once attached thereto after filling of the container.

The mouth of the container preferably receives a teat retaining disc and the teat preferably has a peripheral portion that is trapped between the disc and the cap to retain the teat on the container. The teat on the other hand may be arranged so as not to require a retaining disc.

The cap is preferably screwthreadedly attached to the container. The cap and

container preferably have mutually cooperating formations, whereby the cap can be screwed onto but not unscrewed from the container. The cap preferably includes a ratchet formation on its inner surface and the container preferably has one or more, preferably two lugs on its outer surface, past which the ratchet formation passes as the cap is screwed onto the container but past which the cap cannot be unscrewed. The ratchet formation preferably comprises a plurality of lugs each having a first sloping face relative to the cap inner surface and a second face generally normal to the cap inner surface to form abutments for the lugs on the container.

The baby's bottle of the invention is preferably provided individually packaged and preferably in aseptic condition. The teat is preferably sterilised prior to packaging and packaging is preferably carried out in clean room conditions.

This invention will now be further described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a front view of a disposable baby bottle;

Figure 2 is a section through the baby bottle of Figure 1;

Figure 3 is an exploded view of the baby bottle of Figure 1;

Figure 4 is a section through a cap of the baby bottle of Figure 1; and

Figure 5 is a section through a teat cover of the baby bottle of Figure 1.

Referring to the accompanying drawings, a disposable baby bottle 10 comprises generally a liquid container 12, a teat retaining disc 14, a teat 16, a cap 18 and a teat cover 20. The container 12 has a neck 22. On the outside of the neck 22 is double start screw threading 24 for engagement with cooperating screw threading 26 internally of the cap 18. Just below the screw threading 24 is an annular ring 26

having a pair of diametrically opposed lugs 28 thereon. The container may have graduation markings on its surface. The container is preferably made of a translucent or transparent plastics material, such as polypropylene. The container may be formed by injection moulding or by blow moulding for example.

The teat retaining disc 14 has a raised rim 30, a central annular aperture 32 surrounded by an upstanding wall 34 and an intermediate annular bead 36.

The teat 16 is of a conventional type having a flat annular rim 38 around its main opening 40. The teat sits on the retaining disc with the upstanding wall 34 in the opening 40 and the rim 38 lying between the wall 34 and the bead.

The teat cover 20 is a clear plastics cap, preferably of polypropylene and optionally coloured, that has a wider part 37, that locates on a rebate 39 of the cap 18 by means of pips 41 on the inside of the part 37, leading to a narrower closed part 43.

The cap 18 has a central aperture 42 for the teat, so that when the cap is screwed onto the container the teat rim 38 is trapped between the cap 18 and the disc 14. The cap 18 and the disc 14 are preferably moulded from high density polyethylene.

Below its screw threading, the cap has internally thereof a ratchet formation provided by a series of sloping faced lugs 46. The lugs 46 are arranged so that as the cap is screwed onto the container, the cap slips over the lugs 28 of the container. However, once the cap is in place on the container the lugs 28 abut against the lugs 46 of the cap to prevent the cap from being unscrewed from the container. In that way, the bottle 10 becomes a one-use item that has to be disposed of after use.

The bottles 10 will be provided individually aseptically packaged within a bulk pack. Packaging is preferably carried out in clean room conditions and the teat is preferably sterilised before packaging.

The cap, teat and retaining disc will be on the container but the cap will not be screwed down. To use the bottle the cap/teat unit is removed, the bottle filled and the cap/teat unit screwed completely onto the container. After use, the bottle will be disposed of.

1/2

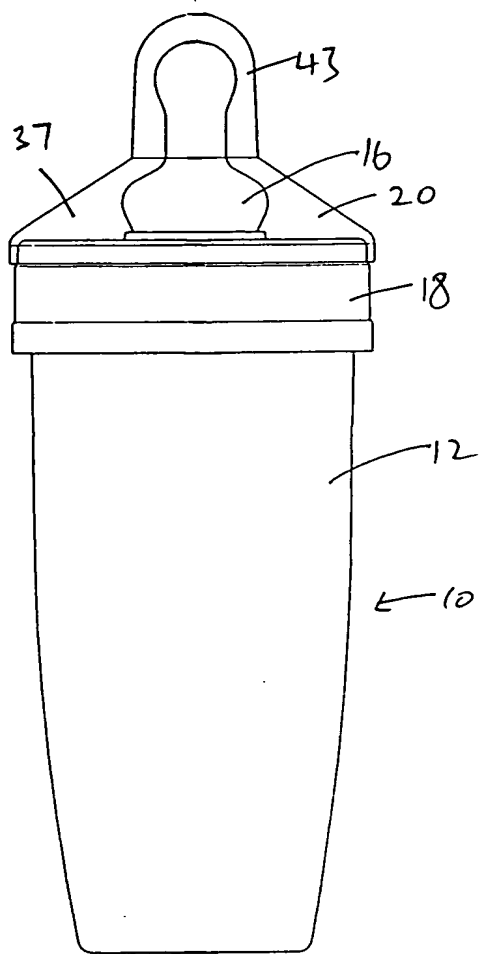


FIG. 1

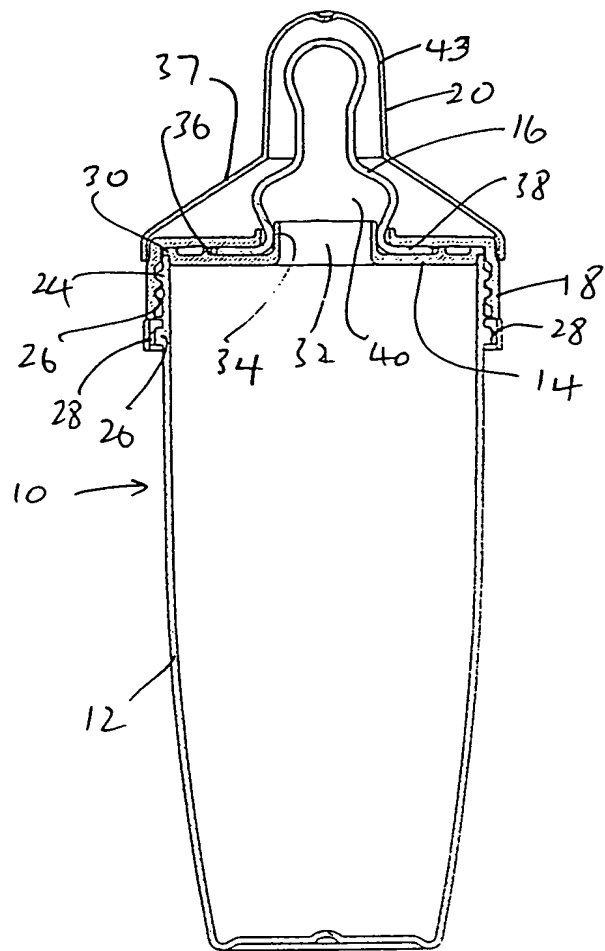


FIG. 2.

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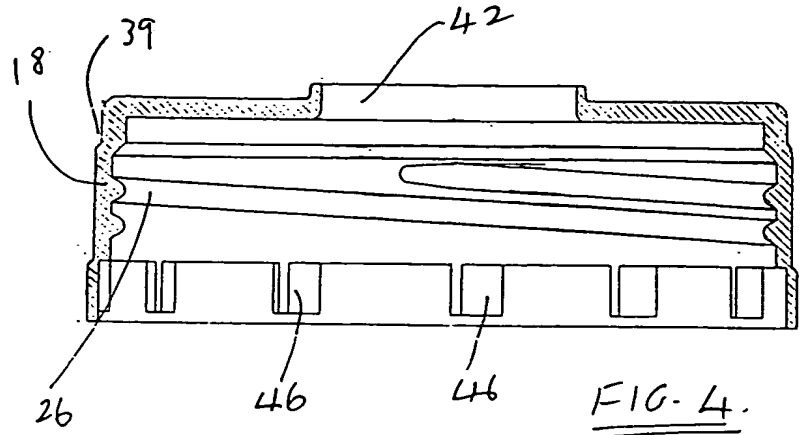
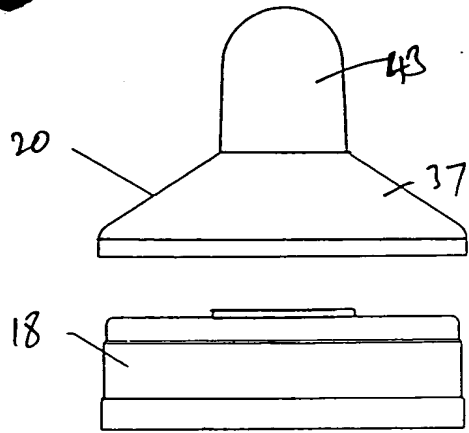


FIG. 4.

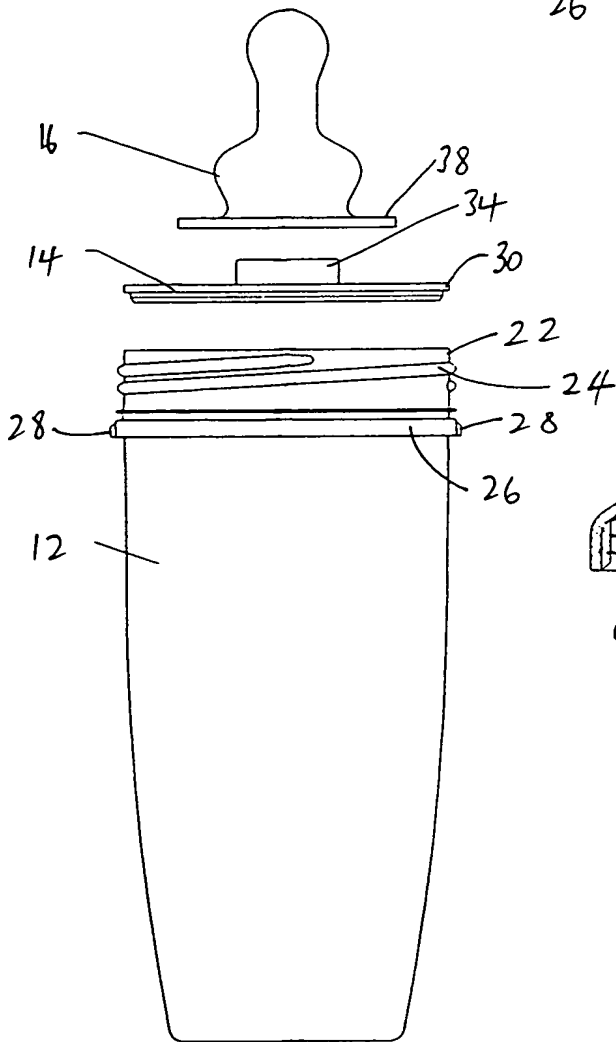


FIG. 3.

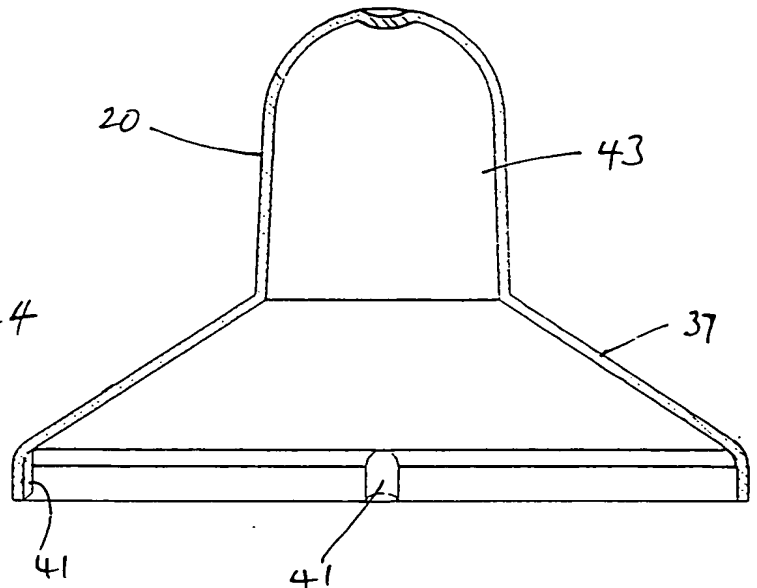


FIG. 5

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